Columbia Gas Transmission

WB XPRESS PROJECT

Virginia Department of Environmental Quality
Coastal Zone Management Program

Federal Consistency Certification

Columbia Gas Transmission, LLC

NATURAL RESOURCE GROUP

an ERM Group company

July 2016

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ACRONYMS AND ABBREVIATIONS

ATWS	additional temporary workspace
BMPs	best management practices
CPA	Chesapeake Bay Preservation Act
CFR	Code of Federal Regulations
Columbia	Columbia Gas Transmission, LLC
CWA	Construction Work Area
CZMA	Coastal Zone Management Act
ECS	Environmental Construction Standards
EFH	Essential Fish Habitat
E&SC Plans	Erosion and Sediment Control Plans
FCPA	Fairfax County Park Authority
FERC	Federal Energy Regulatory Commission
hp	horsepower
MAOP	maximum allowable operation pressure
MP	milepost
MSA	Magnuson-Stevens Fishery Conservation and Management Act
NOAA	National Oceanic and Atmospheric Administration
PAR	Permanent Access Road
PEM	Palustrine Emergent Wetland
PFO	Palustrine Forested Wetland Plan
Plans	FERC's Upland Erosion Control, Revegetation, and Maintenance Plan
Procedures	FERC's Wetland and Waterbody Construction and Mitigation Procedures
Project	WB XPress Project
psig	per square inch gauge
PSS	Palustrine Scrub-Shrub Wetland
SSURGO	Soil Survey Geographic
TBT	Tributyltin
UNT	Unnamed tributary
USACE	United States Army Corps of Engineers
VCP	Virginia Coastal Zone Management Program
VDCR	Virginia Department of Conservation and Recreation
VDEQ	Virginia Department of Environmental Quality
VDGIF	Virginia Department of Game and Inland Fisheries
VMRC	Virginia Marine Resource Commission

Virginia's Coastal Zone Management Program – FEDERAL CONSISTENCY CERTIFICATION

Columbia Gas Transmission, Inc. (Columbia) certifies that the proposed WB XPress Project (Project) complies with the enforceable policies of the federally approved Virginia Coastal Zone Management Program (VCP) and will be conducted in a manner consistent with the VCP.

Federal License or Permit Requested

A Virginia Standard Joint Permit Application has been filed for the Project with the U.S. Army Corps of Engineers (USACE) – Norfolk District, the Virginia Marine Resource Commission (VMRC), and the Virginia Department of Environmental Quality (VDEQ). The Project requires authorization to use a Nationwide 12 permit from the USACE for activities in waters of the United States under Section 404 of the Clean Water Act (33 U.S.C. §1344), including a Section 401 Water Quality Certification under Section 401 of the Clean Water Act. In addition, an application for a Certificate of Public Convenience and Necessity has been filed for the Project with the Federal Energy Regulatory Commission (FERC), under docket number CP16-38-000.

Necessary Data and Information

By this certification that the Project is consistent with the VCP, Virginia is notified that it has six months from the receipt of this letter and accompanying information in which to concur with or object to Columbia's certification. Pursuant to 15 Code of Federal Regulations (CFR) Section 930.63(b), if Virginia has not issued a decision within three months following commencement of State agency review, it shall notify Jennifer Cannon and the federal agency of the status of the matter and the basis for further delay. The State's concurrence, objection, or notification of review status shall be sent to:

Applicant Contact Information:
Jennifer Cannon
Columbia Gas Transmission, LLC
Natural Resource Permitting
1700 MacCorkle Ave SE
Charleston, WV 25314
Phone: (304) 357-2040
Email: jcannon@cpg.com

Federal Agency Contact Information:
Federal Energy Regulatory Commission
Nancy Fox-Fernandez
888 First Street, N.E.
Washington, DC 20426
Phone: (202) 502-8559
Email: Nancy.Fox-Fernandez@ferc.gov

1.0 PROJECT DESCRIPTION

Columbia has applied to the FERC for a Certificate of Public Convenience and Necessity under Section 7(c) of the Natural Gas Act, as amended, for construction, modification, operation, and maintenance of various facilities along its Line WB and Line VB natural gas transmission pipeline system in West Virginia and Virginia, herein referred to as the WB XPress Project (Project). The Project would involve the construction and operation of approximately 29.3 miles of various diameter pipeline, modifications to seven existing compressor stations, construction of two new compressor stations, and uprating the maximum allowable operation pressure (MAOP) on various segments of the existing Line WB and Line VB natural gas transmission pipeline systems. The Project would provide an additional 1.3 billion cubic feet per day of capacity for bi-directional firm transportation service to markets in western West Virginia and northern Virginia. Refer to Figure 1.0-1 for an overview map of Project facilities within the Virginia Coastal Zone.

1.1 PROPOSED FACILITIES

For the purpose of this CZM Certification, only the proposed activities within the Virginia Coastal Zone are being considered, which include construction, operation and maintenance to the following facilities:

Fairfax County, Virginia

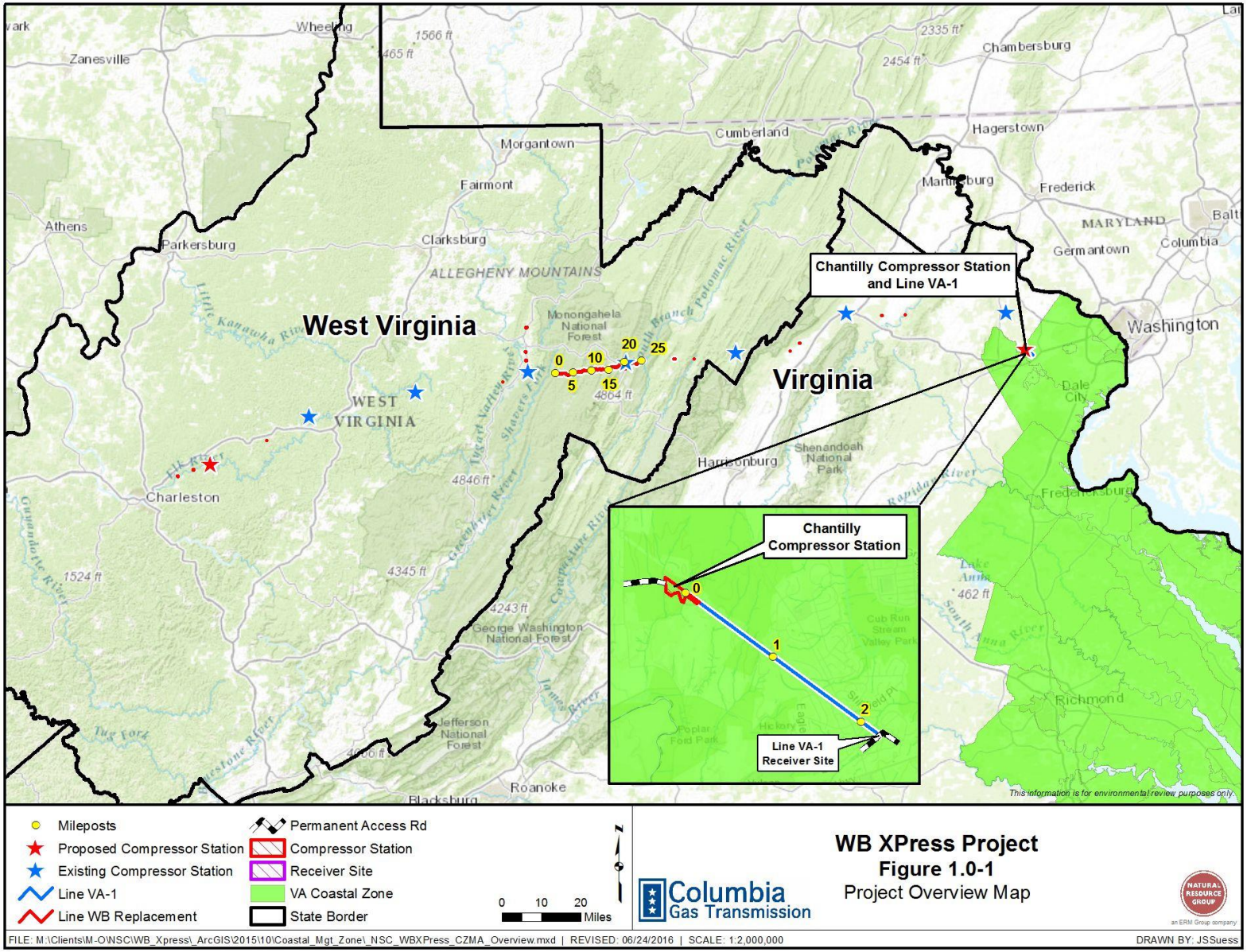
Aboveground Facilities:

- Chantilly Compressor Station: a new electric-driven compressor station at approximately MP 0.0 of the proposed Line VA-1 in Fairfax County, Virginia.

- Installation of a receiver facility at the end of the proposed Line VA-1, in Fairfax County, Virginia.

Pipeline Facilities:

- Line VA-1: installation of approximately 2.2 miles of new 12-inch-diameter natural gas transmission pipeline, approximately 1,800 feet of new dual 20-inch-diameter natural gas transmission pipelines, and associated appurtenances in Fairfax County, Virginia.

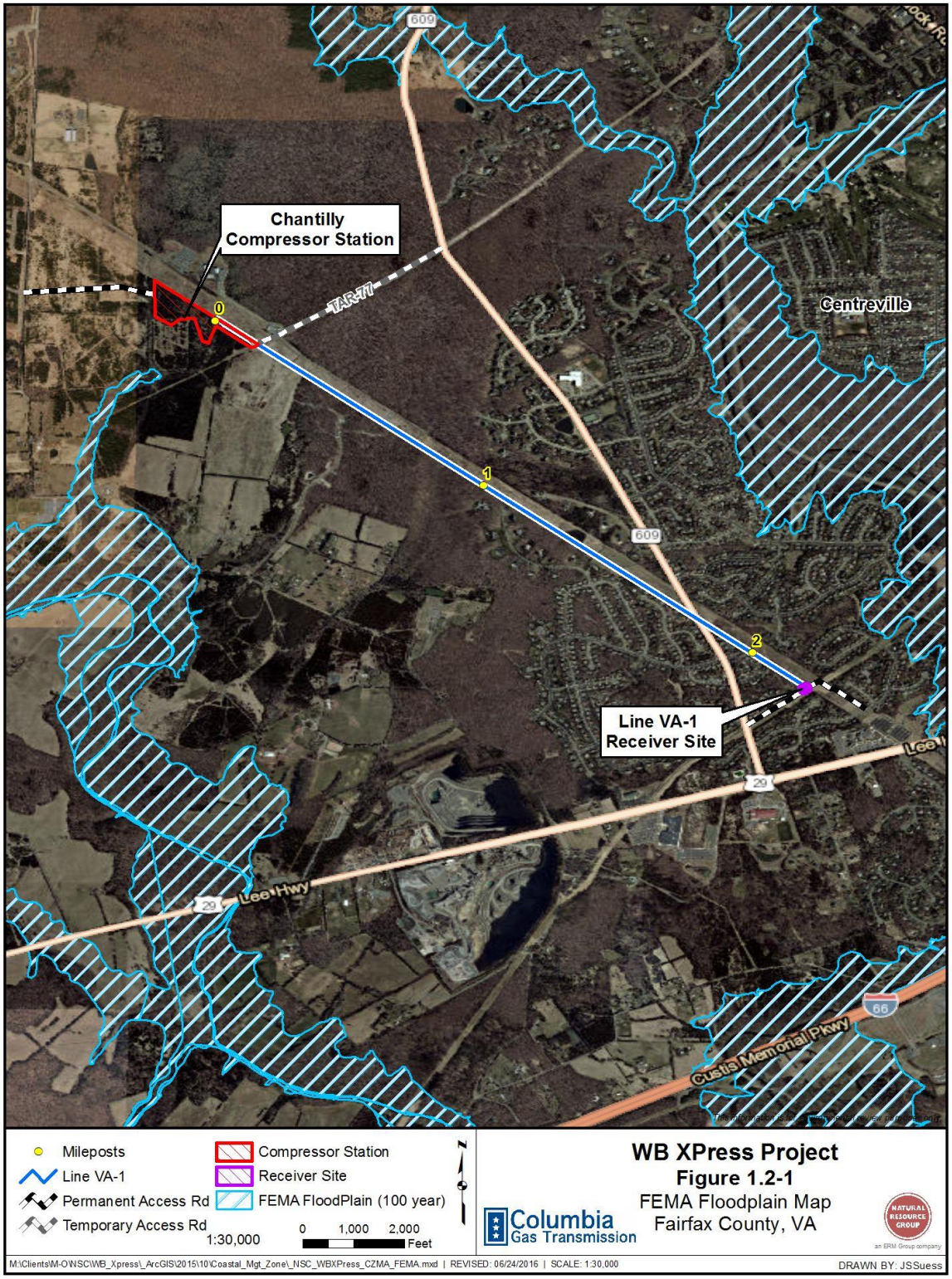

West Virginia
Virginia
WEST VIRGINIA
Chantilly Compressor Station and Line VA-1
Chantilly Compressor Station
Line VA-1 Receiver Site
Wheeling
Zanesville
Morgantown
Fairmont
Clarksburg
Parkersburg
Athens
Charleston
Cumberland
Hagerstown
Frederick
Chambersburg
Germantown
Washington
Harrisonburg
Shenandoah National Park
Richmond
Roanoke
Blacksburg
Jefferson National Forest
George Washington National Forest
Monongahela National Forest
ALLEGHENY MOUNTAINS
MARYLAND
Mileposts
Proposed Compressor Station
Existing Compressor Station
Line VA-1
Line WB Replacement
Permanent Access Rd
Compressor Station
Receiver Site
VA Coastal Zone
State Border
0 10 20 Miles
This information is for environmental review purposes only.
WB XPress Project
Figure 1.0-1
Project Overview Map
Columbia Gas Transmission
FILE: M:\Clients\M-O\NSC\WB_Xpress_ArcGIS\2015\10\Coastal_Mgt_Zone_NSC_WBXPress_CZMA_Overview.mxd | REVISED: 06/24/2016 | SCALE: 1:2,000,000
DRAWN BY: JSSuess

1.2 COASTAL EFFECTS

The Chantilly Compressor Station, Line VA-1, and Line VA-1 Receiver Site have been reviewed for potential negative impacts on land or water resources within Virginia's Coastal Zone. It is unlikely that the proposed activities in Fairfax County, Virginia will have a significant impact on the coastal zone management area due to adherence to Columbia's Environmental Construction Standards (ECS). Columbia's ECS is periodically updated and reviewed for approval by the VDEQ (previously by Virginia Department of Conservation & Recreation). The most current approved version of Columbia's ECS is provided as Appendix C. At the time of construction, the most current VDEQ-approved ECS will be implemented. Furthermore, the Line VA-1 Project components are located approximately 50 miles west of the Atlantic coast and the Chesapeake Bay. The Project will not affect tidal wetlands or streams connected to tidal wetlands. As seen in Figure 1.2-1, the Project will not be located within a FEMA floodplain.

Columbia proposes to construct approximately 2.2 miles of 12-inch-diameter natural gas transmission pipeline, a new electric-driven compressor station, and a new receiver facility in Virginia's coastal zone (Fairfax County).

Overall, the Project will cross 13 waterbodies in Fairfax County. Columbia has filed with the USACE a request to use Nationwide Permit 12, the approval of which will provide that proposed stream impacts will be mitigated consistent with federal requirements. Further details regarding these resources and Columbia's mitigation efforts are included in this document.


Chantilly
Compressor Station
TAR-77
0
1
2
609
Centreville
Line VA-1
Receiver Site
Lee Hwy
29
66
Custis Memorial Pkwy
Mileposts
Line VA-1
Permanent Access Rd
Temporary Access Rd
Compressor Station
Receiver Site
FEMA FloodPlain (100 year)
1:30,000
0 1,000 2,000
Feet
WB XPress Project
Figure 1.2-1
FEMA Floodplain Map
Fairfax County, VA
Columbia
Gas Transmission
NATURAL RESOURCE GROUP
an ERM Group company
M:\Clients\M-O\NSC\WB_Xpress_ArcGIS\2015\10\Coastal_Mgt_Zone_NSC_WBXPress_CZMA_FEMA.mxd | REVISED: 06/24/2016 | SCALE: 1:30,000
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2.0 NECESSARY PROJECT DATA

The following sections provide a complete description of project elements that are applicable to coastal zone management consistency within the coastal zone. Appendices A and B provide both topographic and aerial information on the proposed pipeline and aboveground facilities that are proposed within the coastal zone.

2.1 PROJECT FACILITIES

Project facilities include both underground and aboveground facilities. The location of each facility by milepost (MP) and county is listed in Table 2.1-1.

TABLE 2.1-1

WB XPress Project
Facilities Proposed Within Virginia's Coastal Zone

Facility Name	Milepost	Miles	Diameter (inches)	County	State
New Pipeline Facilities					
Line VA-1	0.0 - 2.2	2.2	12.0	Fairfax County	VA
	TOTAL (miles)	**2.2**			
New Aboveground Facilities					
Chantilly Compressor Station	0.0 [a]	N/A	N/A	Fairfax County	VA
Line VA-1 Receiver Site	2.2 [a]	N/A	N/A	Fairfax County	VA

[a] Milepost associated with Columbia's proposed Line VA-1

2.1.1 Line VA-1 Pipeline Facilities

The proposed Line VA-1, which will consist of a 12-inch-diameter pipeline, will begin at the Chantilly Compressor Station (MP 0.0) and terminate at the Line VA-1 Receiver Site (MP 2.2). The 20-inch diameter pipeline is located within the Chantilly Compressor Station footprint and therefore is not listed as new pipeline. The 2.2 miles of total pipeline will be located within Fairfax County, Virginia.

2.1.2 Aboveground Facilities

The proposed Line VA-1 will require construction of one compressor station, one receiver site, and associated appurtenances.

Chantilly Compressor Station: The installation of one measurement station, two new electric-driven compressor units, 4,000 horsepower (hp) each, and associated appurtenances to pump natural gas through the proposed Line VA-1 interconnecting with an existing Williams Transco pipeline system.

Line VA-1 Receiver Site: Installation of a new receiver facility at the terminus of the proposed Line VA-1.

2.2 TEMPORARY AND PERMANENT WORK AREAS

2.2.1 Pipeline Facilities

The Fairfax County pipeline facilities will be collocated within an existing Dominion Power electric transmission right-of-way. The typical spacing between the proposed construction workspace and adjacent existing rights-of-way will be 25 to 35 feet, with the new pipeline typically placed 18 feet inside of the adjacent existing rights-of-way. Typical separation between pipelines in a shared right-of-way is 25 feet from centerline to centerline. Where Columbia's proposed pipeline will be co-located with Dominion transmission lines, an additional 20 feet of new permanent right-of-way will be acquired for the proposed Project to supplement the current easement.

The temporary land requirements for construction of the Project will differ according to the type of terrain, environmental features, and existing structures encountered along the proposed route. The proposed Line VA-1 requires the installation of 12-inch-diameter pipe, therefore the use of a 40-foot-wide typical construction right-of-way will be sufficient.

At certain locations, staging areas and additional temporary workspace (ATWS) areas are required for construction activities. There is one staging area and two ATWS areas proposed along the Line VA-1 pipeline facilities. Staging and ATWS areas allow for additional space to construct the pipeline in a safe manner and allow for the safe operation and staging of equipment and materials. The total amount of land required during construction is 29.1 acres, and the total amount of land maintained during operation is 20.8 acres.

2.2.2 Aboveground Facilities

Chantilly Compressor Station: The compressor station would be constructed adjacent to an existing utility corridor in Fairfax County, VA. During construction, the compressor station requires approximately 13.2 acres of land; the operational footprint of the facility will be approximately 10 acres. In addition, the Line VA-1 Launcher Site will be installed within the Chantilly Compressor Station. No additional land will be required for the installation of the launcher, and the acreage is already reflected in the totals for the compressor station.

Line VA-1 Receiver Site: The receiver site will be located at the end of Line VA-1 at MP 2.2. During construction, the Line VA-1 receiver site will require less than 0.1 acre of land, and less than 0.1 acre will be retained for operational use.

2.2.3 Access Roads

Columbia would generally use existing public roads or the existing rights-of-way for construction access to Project facilities. Where public access is unavailable, Columbia has identified private access roads necessary for construction. Columbia proposes the use of two permanent access roads (PARs) and one temporary access road (TAR) necessary for construction and operational activities. One of these access roads, permanent access road (PAR) 78 will be constructed on Fairfax County Park Authority (FCPA) greenfield and cross three palustrine emergent marsh (PEM) wetlands and two intermittent streams. The second permanent access road PAR-79 is proposed within an existing right-of-way and will also cross one emergent wetland.

Existing access roads may require widening or improvements for construction activities. Typically, access roads that are less than 25 feet in width will require widening. Access road PAR-78 will be a 24-foot paved road, with a 50-foot permanent corridor. Generally, areas

requiring improvements will be graded and gravel may be installed. Table 2.2.3-1 shows the land requirements for the Project facilities within Virginia's coastal zone.

Of the 13.8 acres of land affected during construction of Line VA-1, approximately 12.7 acres are already maintained right-of-way. Approximately 7.0 acres of permanently impacted land is already maintained right-of-way.

TABLE 2.2.3-1

WB XPress Project
Land Requirements for Project Facilities in Virginia's Coastal Zone [a]

Project Facilities	Length (miles)	Total Land Affected During Construction (acres)	Land Affected Temporarily During Construction (acres)	Operational Land Retained After Construction (acres)	Proposed New Easement for Operation (acres)
New Pipeline Facilities					
Line VA-1	2.2	13.8	6.2	0.0	7.6
Line VA-1 Access Roads	1.5	3.9	2.6	1.3	N/A
Subtotal	**3.7**	**17.7**	**8.8**	**1.3**	**7.6**
New Aboveground Facilities					
Chantilly Compressor Station	N/A	13.2	0.0	0.0	13.2
Line VA-1 Receiver Site	N/A	<0.1	0.0	0.0	<0.1
Subtotal	N/A	**13.2**	**0.0**	**0.0**	**13.2**
Land Requirement TOTAL	**3.7**	**30.9**	**8.8**	**1.3**	**20.8**

[a] The numbers in this table have been rounded for presentation purposes.

2.3 GENERAL PIPELINE CONSTRUCTION PROCEDURES

Columbia will use its latest state-approved Environmental Construction Standards (ECS) for Virginia. Please refer to Appendix C for a copy of the ECS and detailed descriptions of approved construction practices and typicals. Columbia is required to file erosion and sediment control plans with the Virginia Department of Environmental Quality for the linear portions of the Project in Virginia. Because Fairfax County is a designated MS4 locality, Columbia will file stormwater management and erosion and sediment control plans with the County for the Compressor Station facility. The construction process will be coordinated in an effort to minimize the total time land is disturbed to the maximum extent practicable.

Before construction starts, the one-call system will be used in order to have buried utilities in the area identified and flagged. Excavation near these existing utilities will only begin after completing the appropriate procedures.

2.3.1 Hydrostatic Testing

Hydrostatic testing will be conducted in accordance with the requirements of the U.S. Department of Transportation pipeline safety regulations, 49 CFR 192, company testing specifications, and the Virginia General Permit for Discharges from Petroleum Contaminated Sites, Groundwater, Remediation, and Hydrostatic Tests (VAG83). Prior to hydrostatically testing the facilities, cleaning tools will be used to remove loose debris. Test water will be withdrawn from Columbia-approved municipal supplies or other agency-approved sources, and utilized to test sections of pipe and appurtenances. After the testing is completed, water will be discharged in accordance with the applicable regulations and federal and state discharge

requirements. The hydrostatic test water will typically be discharged into a well-vegetated upland area adjacent to the right-of-way, or hauled to an approved and permitted disposal location. Discharged waters will be dispersed by a splash plate and filtered through hay bales or equivalent to minimize erosion and sedimentation potential. The amount of water used for hydrostatic testing at each facility is identified in Table 2.3.1-1.

TABLE 2.3.1-1

WB XPress Project
Hydrostatic Test Water Used at the Project Sites

Facility Name	Milepost	Water Source	Estimated Water Requirements (Gallons)	Locations of Water Discharge (Milepost)	Rate of Discharge (gal/min)
New Pipeline Facilities					
Line VA-1	0.0 - 2.2	Municipal	72,000	0.0	200
New Aboveground Facilities					
Chantilly Compressor Station	0.0	Municipal	30,000	0.0	500
Line VA-1 Receiver Site	2.0	Municipal	6,000	2.0	500

2.4 CONSTRUCTION SEQUENCE, CLEAN-UP, AND RESTORATION

Construction of the pipeline will typically begin with the marking or staking of the construction work area (CWA). As the marking is completed, it will be followed by these activities: clearing, fencing, grading, trenching, pipe laying, stringing, bending, welding, coating, lowering-in, backfilling, testing (hydrostatic), and cleanup and restoration. Columbia will prohibit construction equipment, vehicles, hazardous materials, chemicals, fuels, lubricating oils, and petroleum products from being parked, refueled, stored, or serviced within a 200-foot radius of a private water well, within a 400-foot radius of a public or municipal water well, and within 100 feet of a waterbody, pond, wetland, spring, or seep area. The equipment will be checked for leaks by an inspector prior to being used for construction activities in waterbodies or wetlands.

After construction completion, the disturbed areas will be finish graded and remaining trash and debris will be properly disposed of in compliance with federal, state, and local regulations. After construction is completed, the CWA will be protected by the implementation of erosion control measures, including site-specific contouring, permanent slope breakers, and mulch and reseeding with soil-holding grasses. Contouring will be accomplished using acceptable excess soil from construction. The erosion control measures used will be in accordance with Columbia's ECS and the project-specific E&SC Plans. Columbia will work with landowners and agencies to determine the appropriate seed mixtures to be used for reseeding.

Pipeline markers will be located along the right-of-way and installed in accordance with 49 CFR 192. The markers will identify Columbia as the operator and also list telephone numbers for emergencies and inquiries. Periodic inspections of the right-of-way will be conducted and further restoration measures will be implemented if necessary.

2.5 SPECIALIZED PIPELINE CONSTRUCTION PROCEDURES

2.5.1 Waterbody Crossings

Construction techniques across waterbodies will be consistent with Columbia's ECS, FERC's Procedures, and federal and state permits. Columbia will obtain the appropriate permits associated with the crossing of waterbodies and will install appropriate best management practices (BMPs), as identified in Columbia's ECS, FERC's Procedures, and project-specific E&SC Plans, to minimize the potential impacts to waterbodies. The Project is proposed to cross 13 waterbodies, nine of which are intermittent streams, two are ephemeral streams, one is a perennial stream, and one is a pond. Please refer to Table 2.5.1-1 for a summary of waterbodies crossed by the proposed Project.

Dry-ditch construction procedures (dam and pump or flume) are proposed to minimize potential impacts to waterbodies. In order to limit the time required for construction of a waterbody crossing, the right-of-way will be prepared on either side of the waterbody prior to the construction of the actual crossing. For more specific information regarding waterbodies, please refer to the Wetland and Waterbody Delineation Report found in Appendix D.

TABLE 2.5.1-1

WB XPress Project
Waterbody Crossing Summary Table

Project/ Facility	Mile-post	Waterbody ID	Waterbody Name	Flow Regime	Ordinary High Water Mark Width at the Centerline Crossing (feet)	Crossing Method
New Pipeline Facilities – Temporary Stream Crossings						
Line VA-1	0.0	SFAG001I	UNT to Bull Run	Intermittent	5.0	Dam and Pump or Flume
	0.2	SFAG004E	UNT to Bull Run	Ephemeral	1.0	Dam and Pump or Flume
	0.5	SFAG005I	UNT to Bull Run	Intermittent	3.0	Dam and Pump or Flume
	0.7	SFAG012I	UNT to Bull Run	Intermittent	4.0	Dam and Pump or Flume
	0.9	SFAM011E	UNT to Bull Run	Ephemeral	2.0	Dam and Pump or Flume
	1.3	OFAT001	Unnamed Pond	N/A	N/A	Dam and Pump or Flume
	1.9	SFAT005I	UNT to Cub Run	Intermittent	3.0	Dam and Pump or Flume
	1.9	SFAT004I	UNT to Cub Run	Intermittent	2.5	Dam and Pump or Flume
	2.1	SFAT003I	UNT to Cub Run	Intermittent	2.5	Dam and Pump or Flume
	2.1	SFAT002P	UNT to Cub Run	Perennial	3.0	Dam and Pump or Flume
	2.2	SFAT001I	UNT to Cub Run	Intermittent	3.5	Dam and Pump or Flume
New Aboveground Facilities – Temporary Stream Crossing						
Chantilly Compressor Station	N/A	SFAG001I	UNT to Bull Run	Intermittent	5.0 [a]	Dam and Pump or Flume
Permanent Access Roads – Permanent Stream Crossing						
PAR-78 (Line VA-1)	N/A	SFAG019I	UNT to Bull Run	Intermittent	2.5	Proposed New Culvert Crossing
	N/A	SFAG018I	UNT to Bull Run	Intermittent	5.0	Proposed New Culvert Crossing

[a] Waterbodies located in the proposed workspaces for the aboveground facilities; however, impacts will be avoided and minimized per Columbia's ECS.

UNT = unnamed tributary

Flume Crossing Method

The flume crossing method will consist of temporarily directing the flow of water through one or more flume pipes over the area to be excavated. This method will allow excavation of the pipe trench across the waterbody completely underneath the flume pipes without disruption of water flow in the stream. Stream flow will be diverted through the flumes by constructing two bulkheads, using sand bags or plastic dams. Following completion of pipeline installation, backfill of the trench, and restoration of waterbody banks, the bulkheads and flume pipes will be removed. This crossing method generally minimizes the duration of downstream turbidity by allowing excavation of the pipeline trench under relatively dry conditions.

Dam-and-Pump Crossing Method

The dam and pump method involves installation of temporary dams upstream and downstream of the proposed waterbody crossing location. The temporary dams will typically be constructed using sandbags and plastic sheeting. Following dam installation, appropriately sized pumps will be used to dewater the upstream impoundment and transport the stream flow around the CWA and trench to the downstream side of the work area. Intake screens will be installed at the pump inlets to prevent entrainment of aquatic life, and energy dissipating devices will be installed at the pump discharge point to minimize erosion and streambed scour. Trench excavation and pipeline installation will then commence through the dewatered portion of the waterbody channel. Following completion of pipeline installation, backfill of the trench, and restoration of waterbody banks, the temporary dams will be removed, and flow through the CWA will be restored. This method is appropriate for those waterbody crossings where pumps can adequately transfer the stream flow volume around the work area and there are no concerns about the temporary passage of sensitive species.

For ephemeral or intermittent streams where there is no perceptible flow at the time of crossing, upland crossing techniques will be used. A flume pipe would be kept on site.

2.5.2 Wetland Crossings

Construction techniques within wetlands will be consistent with Columbia's ECS, FERC's Procedures, and federal and state permits. Currently, Columbia proposes standard construction techniques for wetland crossings. Columbia will obtain the appropriate permits associated with crossing jurisdictional wetlands. Columbia will install appropriate BMPs, as identified in Columbia's ECS, FERC's Procedures, and project-specific E&SC Plans, to minimize the potential impacts to wetlands. Table 2.5.2-1 provides a summary of the wetlands crossed by the proposed Project.

Wetland impacts from construction are short-term and localized due to the nature of the Project (i.e., a linear underground facility). There will be approximately 0.01 acre of permanent fill in two wetlands (WFAG013 and WFAG014) associated with the Project due to permanent access roads. Permanent conversion of wetland vegetation cover will be mitigated through consultation with the USACE Norfolk. Construction techniques will be used to minimize workspace requirements, preserve the seed bank (topsoil segregation), and promote germination (restore grades and avoid compaction), and thus enhance recovery through restoration measures. Successful re-vegetation of wetlands is expected. Columbia will restore hydrologic conditions and soil profiles following construction, preserve the existing seed bank, and follow its ECS for restoration of wetlands. Columbia believes select seeding, natural re-vegetation, in conjunction with exotic/nuisance weed monitoring and control, is the most cost-effective method of restoring

wetlands in the pipeline rights-of-way. The Project proposes to cross 17 delineated wetlands. For more specific information regarding these wetlands, please refer to the Wetland and Waterbody Delineation Report found in Appendix D.

TABLE 2.5.2-1

WB XPress Project
Wetlands Crossed or Otherwise Impacted by the Project

Facility Name	Wetland ID	Cowardin Classification[a]	Milepost	Crossing Method
New Pipeline Facilities				
Line VA-1	WFAG001E	PEM	0.0	Open Cut
	WFAG002E	PEM	0.2	Open Cut
	WFAG003E	PEM	0.4	Open Cut
	WFAG004E	PEM	0.5	Open Cut
	WFAG008F	PFO	0.7	Open Cut
	WFAM007E	PEM	1.0	Open Cut
	WFAM006E	PEM	1.1	Open Cut
	WFAM008E	PEM	1.3	Open Cut
	WFAT005E	PEM	1.4	Open Cut
	WFAT004S	PSS	1.5	Open Cut
	WFAT001E	PEM	2.2	N/A [b]
New Aboveground Facilities				
Chantilly Compressor Station	WFAG001F	PFO	2.2	Open Cut
Access Roads				
TAR-77	WFAG002E	PEM	0.2	Temporary fill
TAR-77	WFAM009E	PEM	0.2	Temporary fill
PAR-78	WFAZ002E	PEM	0.0	Permanent fill
PAR-78	WFAZ003E	PEM	0.0	Permanent fill
PAR-78	WFAZ004E	PEM	0.0	Permanent fill
PAR-79	WFAG012E	PEM	2.2	Permanent fill

[a] PEM=Palustrine Emergent Wetland, PFO=Palustrine Forested Wetland, PSS=Palustrine Scrub-Shrub.
[b] Wetland does not cross the centerline, but it is located within the project facility. Impacts will be avoided and minimized per Columbia's ECS.

2.5.3 Residential Areas

Where residences are located within 50 feet of the edge of the CWA, Columbia will reduce construction right-of-way as practicable to minimize inconvenience to property owners. Special care will be taken in residential areas to minimize impacts and to control noise and dust to the extent practicable for nearby residences. Columbia will use special construction techniques, which may include stove-pipe, drag section, or mini-crew construction methods, where appropriate. During construction in narrow areas, Columbia will endeavor to minimize impacts to residences and residential areas and to perform clean-up thoroughly and promptly.

Temporary impacts on residential areas may include disturbance of lawns, removal of fences, and other minor residential accessory structures; removal of ornamental shrubs; disturbance of streets, driveways, and sidewalks; altered traffic patterns; and temporary noise impacts from construction activities. Construction activities, as outlined in Columbia's ECS, will be expedited to the extent practical while still maintaining safety. Table 2.5.3-1 lists residences within 50 feet of the CWA.

TABLE 2.5.3-1

WB XPress Project
Location of Residences within 50 feet of the Construction Work Area in Virginia's Coastal Zone

Project Facility	County	State	Milepost	Distance from CWA (feet)
Line VA-1	Fairfax	Virginia	1.4	39
Line VA-1	Fairfax	Virginia	1.5	43
Line VA-1	Fairfax	Virginia	1.5	41
Line VA-1	Fairfax	Virginia	1.6	39
Line VA-1	Fairfax	Virginia	1.6	27
Line VA-1	Fairfax	Virginia	1.6	40
Line VA-1	Fairfax	Virginia	1.8	35
Line VA-1	Fairfax	Virginia	1.9	50
Line VA-1	Fairfax	Virginia	1.9	48
Line VA-1	Fairfax	Virginia	1.9	34

2.5.4 Local Park Authority Managed Land

The Elklick Woodlands Natural Area Preserve is directly crossed by the Project resulting in a 1.0 acre impact area within an existing utility right-of-way. This preserve is owned by the FCPA, and was established as a joint venture with the Park Authority and the Virginia Department of Conservation and Recreation (VDCR). In addition to the Elklick Woodlands Natural Area Preserve, the Project also crosses the Elklick Diabase Flatwoods Conservation Site which is also managed by the FCPA and holds a biodiversity ranking of B2, representing very high significance, and includes a community of Northern Hardpan Basic Oak-Hickory Forest.

Neither the state, nor the FCPA have a specific management plan for these preserves, thus, Columbia will work with FCPA and VDCR officials to avoid and minimize impacts that may occur as a result of the Project. The Project crosses approximately 0.2 miles of the Natural Area Preserve and 0.2 miles of the Diabase area. The proposed Project complies with this section since there will be no long-term negative impacts to the recreational value of the natural area.

The designated Chantilly Compressor Station (Site 5) is proposed to be located entirely on FCPA property, and is within the Sully Woodlands District. Currently, the Sully Woodlands District is wooded and does not contain formal recreational areas. The FCPA, however, has proposed future development of this land into a potential region-wide recreation zone, off-road bike area, and resource protection area (Halifax Point District Park). Columbia has worked with the FCPA to develop the proposed site for the compressor station and access road in concert with their planned park development on their adjacent property.

2.5.5 Natural, Recreational, or Scenic Areas

In Virginia, one trail is crossed by the proposed Project. The unnamed trail along the proposed Line VA-1 will be removed during construction, and replaced following completion. Prior to the start of construction, Columbia will make efforts to alert recreational users of trails of the anticipated time and duration of disruptions associated with construction. Columbia will work with the FCPA or trail steward to determine the most efficient method for notification. Such notifications could include mailings, an informational notice posted on the managing agency's website, advertisements in local media, and/or notices posted in public areas. Trail users will experience visual impacts. However, because the majority of the Project is located adjacent to

existing rights-of-way, visual impacts will be minimized and limited to periods of active construction.

2.6 CONSTRUCTION AND PERMIT SCHEDULE

Table 2.6-1 summarizes the proposed construction schedule for the Project components located in Virginia's coastal zone.

TABLE 2.6-1

WB XPress Project
Construction Schedule for Project Facilities within Virginia's Coastal Zone [a]

Project Facilities	Estimated Construction Start Date	Anticipated In-Service Date
New Pipeline Facilities		
Line VA-1	January 2018	April 2018
New Aboveground Facilities		
Chantilly Compressor Station	February 2017	October 2018
Line VA-1 Receiver Site	January 2018	October 2018

[a] Vegetation clearing at facilities will occur per federal, state, and local timing requirements which may occur before estimated construction start dates.

Table 2.6-2 summarizes the anticipated permits and approvals, administering agencies, and status of authorizations for the proposed Project.

TABLE 2.6-2

Anticipated Environmental Permits, Approvals, and Consultations for the WB XPress Project

Agency	Point of Contact	Permit/Approval/Consultation	Filing Date (Anticipated)	Receipt Date (Anticipated)
Federal				
Federal Energy Regulatory Commission	Nancy Fox-Fernandez	Certificate of Public Convenience and Necessity under Section 7(c) of the Natural Gas Act	December 2015	(December 2016)
U.S. Army Corps of Engineers – Norfolk	Ron Stouffer (Norfolk)	Department of the Army Permits under Section 404 of the Clean Water Act and Section 10 of the Rivers and Harbors Act (Joint Permit Application)	March 2016 and (July 2016)	(August 2016)
U.S. Fish and Wildlife Service – Virginia, Ecological Field Services Offices	Troy Andersen, Sumalee Hoskins	Consultation under Section 7 of the Endangered Species Act	July 2015[a]	November 2015
National Oceanic and Atmospheric Administration – Great Atlantic Regional Office	Julie Crocker, David O'Brien	Consultation under Section 7 of the Endangered Species Act	April 2015[a]	May 2016
U.S. Department of Agriculture- Farm Service Agency and Natural Resource Conservation Agency	Don Flegel (Virginia) Diane Dunaway (Virginia)	Conservation Reserve Program and Wetland Reserve Program Consultation	July and November 2015	July 2015 and April 2016

TABLE 2.6-2

Anticipated Environmental Permits, Approvals, and Consultations for the WB XPress Project

Agency	Point of Contact	Permit/Approval/Consultation	Filing Date (Anticipated)	Receipt Date (Anticipated)
Commonwealth: Virginia				
Virginia Department of Environmental Quality – Air Division	Janardan Pandey	Air Permit – State Major Permit	January 2016	(November 2016)
Virginia Department of Environmental Quality – Water Division	Beth Howell	Virginia Water Protection Permit (Joint Permit Application)	March 2016	(August 2016)
Virginia Department of Environmental Quality – Water Division	Beth Howell	Water Quality Certificate under Section 401 of the Clean Water Act (Joint Permit Application)	March 2016 and (August 2016)	(September 2016)
Virginia Marine Resources Commission	Jay Woodward	River and Stream Crossing Permit (Joint Permit Application)	March 2016	NA (Exempt) per March 2016 correspondence
Virginia Department of Environmental Quality – Water Division	Larry Gavan	General Permit for Discharges of Stormwater from Construction Activities (9VAC25-880) - Facilities	(August 2016)	(December 2016)
Virginia Department of Environmental Quality – Water Division	TBD	General Permit for Discharges from Petroleum Contaminated Sites, Groundwater Remediation, and Hydrostatic Tests (VAG83)	N/A (exempt)	N/A (exempt)
Virginia Department of Conservation and Recreation	René Hypes & Alli Baird	Natural Heritage/Protected Species Consultation	May/July/November 2015 and May 2016	June/August/ December 2015 and June 2016
Virginia Department of Game and Inland Fisheries	Amy Ewing	Natural Heritage/Protected Species Consultation	July 2015	December 2015
Virginia Department of Historical Resources	Roger Kirchen	Consultation under Section 106 of the National Historic Preservation Act	December 2015	March 2016
Local				
Fairfax County, Virginia	Daun Klarevas & Shahab Baig	Plan of Development	(October 2016)	(May 2017)

[a] To comply with the provisions of the Endangered Species Act, Columbia has evaluated and certified that the Project activities are consistent with the U.S. Fish and Wildlife Service approved NiSource/Columbia Multi-Species Habitat Conservation Plan and the resulting programmatic Section 7 consultation.

3.0 EVALUATION AND FINDINGS RELATING TO PROBABLE COASTAL EFFECTS OF THE PROPOSED PROJECT

Potential effects of the proposed Project on the coastal zone are described below. Section 3.1 addresses impacts related to the VCP's enforceable and advisory policies or other concerns.

3.1 COMPLIANCE WITH ENFORCEABLE AND ADVISORY POLICIES OF THE CZMA

Columbia will construct and operate the Project, minimizing environmental impacts and complying with the permits, Columbia's 2014 ECS, and Columbia's Multi-Species Habitat Conservation Plan with avoidance and minimization measures for the protection of federally listed species. Columbia will train both Columbia and other sub-contracted employees to understand, use, and adhere to the environmental plans and permit requirements. Environmental Inspectors will be hired to monitor compliance during the construction and restoration stages of the Project. Columbia will be responsible for ensuring the implementation of environmental requirements during the construction of the Project. This section addresses potential impacts of the proposed Project on each of the enforceable and advisory policies comprising the VCP.

3.1.1 Fisheries Management

The program stresses the conservation and enhancement of finfish and shellfish resources and the promotion of commercial and recreational fisheries to maximize food production and recreational opportunities. This program is administered by the Marine Resources Commission (VMRC) (Virginia Code §28.2-200 through §28.2- 713) and the Department of Game and Inland Fisheries (DGIF) (Virginia Code §29.1-100 through §29.1-570).

The State Tributyltin (TBT) Regulatory Program has been added to the Fisheries Management program. The General Assembly amended the Virginia Pesticide Use and Application Act as it related to the possession, sale, or use of marine antifoulant paints containing TBT. The use of TBT in boat paint constitutes a serious threat to important marine animal species. The TBT program monitors boating activities and boat painting activities to ensure compliance with TBT regulations promulgated pursuant to the amendment. The MRC, DGIF, and Virginia Department of Agriculture and Consumer Services share enforcement responsibilities (Virginia Code §3.1-249.59 through §3.1-249.62).

Columbia will use the flume or dam-and-pump method to construct the proposed pipeline across waterbodies as referenced in the ECS. These methods are described in detail in section 2.5.1. The proposed Project will have no foreseeable impacts of finfish or shellfish resources, and complies with this section.

Essential Fish Habitat

The Magnuson-Stevens Fishery Conservation and Management Act (MSA) (16 USC 1801 et seq.) (Public Law 94-265 as amended through January 12, 2007) established a management system for marine fisheries in the United States. Congress requested National Oceanic and Atmospheric Administration (NOAA) National Marine Fisheries Service, fishery management councils, and other federal and state agencies, along with the fishing community, to identify habitats essential to managed species, including marine, estuarine, and anadromous finfish, mollusks, and crustaceans. These essential fish habitats (EFH), include "those waters and substrate necessary to fish for spawning, breeding, feeding, or growth to maturity." As required

by the MSA, federal agencies that authorize, fund, or undertake activities that may adversely affect EFH must consult with NOAA Fisheries.

Based on review of the NOAA Fisheries EFH Mapper (NOAA, 2015a), the Guide to EFH Designations in the Northeastern United States (NOAA, 2015b), and the Guide to EFH Descriptions (Northeastern United States) (NOAA, 2015c), no waterbodies crossed by or located near the Project contain or have the potential to contain species managed by NOAA Fisheries, nor do they include EFH as defined by the MSA. NOAA provided confirmation that the Project does not cross any waterbodies that support ESA-listed species under NOAA Fisheries jurisdiction. Therefore, the Project will have no adverse effect on EFH and continued consultation with NOAA Fisheries for ESA -species and EFH is not required. Correspondence is attached.

The Virginia Department of Game and Inland Fisheries (VDGIF) has issued general guidance (VDGIF, 2015a) for the protection of fisheries by restricting in-stream work during periods of the year when fish species may be most sensitive to human activities. Columbia has also consulted directly with VDGIF (Virginia Department of Game and Inland Fisheries) regarding the various Project locations and stream crossings in Virginia. None of the VDGIF's concerns were fisheries related pursuant to an email issued by VDGIF for the Project on August 20, 2015. The e-mail issued by VDGIF for the Project recommends that Columbia adhere to appropriate sedimentation and stormwater controls to minimize potential impacts to local waterbodies. The VDGIF e-mail is included in Appendix 5.

3.1.2 Subaqueous Lands Management

The management program for subaqueous lands establishes conditions for granting or denying permits to use state-owned bottomlands based on considerations of potential effects on marine and fisheries resources, wetlands, adjacent or nearby properties, anticipated public and private benefits, and water quality standards established by the Department of Environmental Quality (VDEQ) Water Division. The program is administered by the MRC (Virginia Code §28.2-1200 through §28.2-1213).

As identified in Table 2.5.1-1, the proposed Project will cross one perennial waterbody, 10 intermittent waterbodies, two ephemeral waterbodies and one open water pond in the coastal zone of Fairfax County, Virginia. Impacts on these waterbodies as a result of construction could occur in stream channels and on adjacent banks. Impacts could include temporary and permanent local modifications to subaqueous lands involving sedimentation, temporary disturbances, and soil compaction. These impacts would be limited to the period of in-stream construction. Pre-construction conditions would be restored shortly after restoration activities are completed. As required under Section 404 of the Clean Water Act, a Standard Joint Permit Application was submitted March 14, 2016 to Ron Stouffer with the USACE Norfolk District. An update to the application is planned to be submitted in July 2016 to address minor Project adjustments. The proposed Project will comply with the Nationwide Permit 12 conditions and will therefore be consistent with federal regulations.

3.1.3 Tidal and Non-Tidal Wetlands Management

The purpose of the wetlands management program is to preserve tidal wetlands, prevent their despoliation, and accommodate economic development in a manner consistent with wetlands preservation.

(i) The tidal wetlands program is administered by the MRC (Virginia Code §28.2-1301 through §28.2-1320).

(ii) The Virginia Water Protection Permit program administered by the VDEQ includes protection of wetlands --both tidal and non-tidal. This program is authorized by Virginia Code §62.1-44.15:5 and the Water Quality Certification requirements of §401 of the Clean Water Act of 1972.

The proposed Project will not impact tidal wetlands. However, as identified in Table 2.5.2-1 the Project will cross 18 non-tidal wetlands. Wetlands were initially identified using the National Wetland Inventory to provide a preliminary analysis of wetland resources and where they could be avoided or options to minimize their disturbance. The wetlands were then field verified during survey of the Project area. Temporary impacts to wetlands will include loss of vegetation during the construction phase and temporary fill during construction. Temporarily impacted wetlands will be restored upon construction completion. There will be a total of approximately 0.9 acre of temporary disturbance to wetlands, of which approximately 0.8 acre is PEM wetlands, and less than 0.1 acre is PSS and PFO wetlands. Long-term impacts to wetlands temporarily impacted will be the conversion of forested wetland to scrub-shrub wetland within the pipeline alignment that will be permanently maintained. A small area of scrub-shrub wetland will also be converted to emergent wetland within the permanent right-of-way as well. There will be approximately 0.01 acre of permanent fill in three wetlands (WFAZ002E, WFAZ003E, and WFAZ004E) crossed by access road PAR-78.

Construction in wetlands will be performed in accordance with the techniques specified in Columbia's ECS and FERC's Procedures, including minimizing the CWA width at wetland crossings. In accordance with Columbia's ECS and FERC's Procedures, Columbia will locate ATWS a minimum of 50 feet from the edges of wetland areas. If a 50-foot setback is not possible due to site-specific conditions, a variance from FERC's Procedures would be requested. No ATWS areas are currently proposed within 50 feet of wetlands.

Restoration activities will involve returning wetlands to pre-construction contours and seeding in non-inundated areas with an approved wetland seed mix. In general, hydrologic conditions are not anticipated to be impacted as a result of Project construction. Columbia will implement the minimization and mitigation measures identified its ECS during construction, and post-construction activities. As noted above, a Standard Joint Permit Application was submitted March 14, 2016 to Beth Howell with the Virginia Marine Resources Commission. A response dated March 22, 2016 was received indicating that no approval from VMRC is required the Project does not fall within the jurisdiction of VMRC. The proposed Project complies with this section.

3.1.4 Dunes Management

Dune protection is carried out pursuant to the Coastal Primary Sand Dune Protection Act and is intended to prevent destruction or alteration of primary dunes. This program is administered by the Marine Resources Commission (Virginia Code §28.2-1400 through §28.2- 1420).

The proposed Project does not impact primary dunes because it is not located in Accomack, Lancaster, Mathews, Northampton, Northumberland Counties, or the cities of Hampton, Norfolk, or Virginia Beach. The proposed Project complies with this section.

3.1.5 Non-point Source Pollution Control

Virginia's Erosion and Sediment Control Law requires soil-disturbing projects to be designed to reduce soil erosion and to decrease inputs of chemical nutrients and sediments to the Chesapeake Bay, its tributaries, and other rivers and waters of the Commonwealth. This program is administered by VDEQ (Virginia Code §62.1-44.15:51 et seq.).

Soil characteristics along Line VA-1 were identified and assessed using the Soil Survey Geographic (SSURGO) database (Soil Survey Staff, 2015). This database is a digital version of the original county soil surveys developed by the Natural Resources Conservation Service for use with geographic information systems. The database provides the most detailed level of soils information for natural resource planning and management.

The SSURGO database was queried for attribute data pertaining to prime farmland, hydric soils, compaction prone soils, water and wind erodible soils, soils with re-vegetation concerns, stony/rocky soils, and shallow bedrock within the Project footprint. Table 3.1.5-1 provides acreage of each classification.

TABLE 3.1.5-1

WB XPress Project
Soil Characteristics Crossed (Acres)[a]

Pipeline/Facility/ County/ State or Commonwealth	Total Acres in CZM Area	Prime Farmland	Hydric Soils	Compaction Prone	Highly Erodible		Revegetation Concerns	Stony/ Rocky Soils	Shallow to Bedrock
					Water	Wind			
Line VA-1	13.8	8.1	3.2	9.2	2.1	0.0	2.1	1.5	6.3
Line VA-1 Receiver Site	0.1	<0.1	<0.1	<0.1	<0.1	0.0	<0.1	0.0	<0.1
Chantilly Compressor Station	13.2	11.6	0.9	1.6	9.7	0.0	9.7	11.7	13.2
Line VA-1 Access Roads	3.9	1.9	0.7	2.5	0.5	0.0	0.5	1.3	2.7
Fairfax County TOTAL	31.0	21.6	4.8	13.3	12.3	0.0	12.3	14.5	22.2

[a] The numbers in this table have been rounded for presentation purposes. As a result, the totals may not reflect the sum of the addends.

Construction activities with potential to affect soil stability and revegetation efforts include clearing of vegetation, topsoil stripping, grading, trenching, backfilling, and restoration. Potential impacts to soil include:

- loss of soil due to erosion;
- reduction of soil quality by mixing topsoil and subsoil or by bringing rocks to the surface;
- compaction of soil from heavy construction equipment; and
- disruption of surface and subsurface drainage systems.

To minimize impacts on soils, Columbia will implement site-specific E&SC Plans and the Columbia ECS for each proposed Project facility. The most current VDEQ-approved ECS will be used at the time of construction. Linear facilities proposed across multiple counties in Virginia are exempt from a Virginia National Pollutant Discharge Elimination System (VNPDES) permit. Columbia will, however, prepare a stormwater pollution prevention plan and erosion and

sediment control plan for the Chantilly CS since it is within a municipal separate storm sewer system (MS4) community. These plans will be included with the local Fairfax County Plan of Development anticipated to be submitted to the county for approval in Summer 2016. The proposed Project complies with this section.

3.1.6 Point Source Pollution Control

The point source program is administered by the State Water Control Board (VDEQ) pursuant to Virginia Code §62.1- 44.15. Point source pollution control is accomplished through the implementation of the National Pollutant Discharge Elimination System permit program established pursuant to Section §402 of the federal Clean Water Act and administered in Virginia as the Virginia Pollutant Discharge Elimination System permit program. The Water Quality Certification requirements of §401 of the Clean Water Act of 1972 is administered under the Virginia Water Protection Permit program.

Following construction, the pipeline will be hydrostatically tested to verify the integrity of the welds in accordance with 49 CFR 192.

Columbia will utilize municipal water or surface water in accordance with rules and regulations for hydrostatic testing. The water will be accessed either by local tapping or trucking and will be conducted in a manner that will not reduce water flow to a point that would impair flow or impact fishery and recreational uses. To minimize impacts, water will be drawn out with a low-pressure pump and screening on the intakes will be sized according to withdrawal permit requirements.

Columbia will follow federal, state, and local permit requirements with regard to water withdrawal and discharge. No harmful chemical additives will be used during hydrostatic testing or discharge (test water may be de-chlorinated by dissipation or treatment with sodium bisulfite prior to discharge), and will be conducted in accordance with permit requirements and Columbia's ECS. No significant water quality impacts are anticipated as the result of the withdrawal and discharge from hydrostatic testing, but there may be stormwater discharges at the Chantilly CS.

Columbia will implement its ECS and comply with Virginia General Permit for Discharges from Petroleum Contaminated Sites, Groundwater, Remediation, and Hydrostatic Tests (VAG83). Pursuant to the aforementioned permit requirement, Columbia will have obtained authorization to use the General Permit before hydrostatic testing and will comply with the conditions including dissipating energy during discharge to well-vegetated upland areas to minimize erosion. Water discharged over land will be directed through containment structures such as hay bales and/or filter bags and the discharge rate will be regulated using valves. Columbia may, in some cases, elect to contain, transport, and dispose the hydrostatic test water at an approved off-site and permitted water treatment facility. The proposed Project complies with this section.

3.1.7 Shoreline Sanitation

The purpose of this program is to regulate the installation of septic tanks, set standards concerning soil types suitable for septic tanks, and specify minimum distances that tanks must be placed away from streams, rivers, and other waters of the Commonwealth. This program is administered by the Department of Health (Virginia Code §32.1-164 through §32.1-165).

The proposed facilities do not include the addition or modification of septic tanks or septic fields. The proposed Project complies with this section.

3.1.8 Air Pollution Control

The program implements the federal Clean Air Act to provide a legally enforceable State Implementation Plan for the attainment and maintenance of the National Ambient Air Quality Standards. This program is administered by the State Air Pollution Control Board (Virginia Code §10.1-1300 through 10.1-1322).

A general conformity applicability analysis is completed by adding together non-exempt direct and indirect emissions of nonattainment or designated precursor pollutants associated with the Project while excluding emissions associated with an air permit. The emissions are then compared to the applicable *de minimis* thresholds. If the emissions are under the threshold values, a conformity determination is not required. The Chantilly Compressor Station will run on electric power and will not require an air permit. As shown in Tables 3.1.8-1 and Table 3.1.8-2, the Project complies with this section because emissions will be below the *de minimis* thresholds.

TABLE 3.1.8-1

WB XPress Project
Attainment Status and General Conformity *De Minimis* Thresholds

County	Facility	Attainment	Nonattainment	Maintenance	General Conformity *De Minimis* Threshold (TPY)
Fairfax, VA[a]	Chantilly Compressor Station	NO_2; CO; PM_{10}; 2006 $PM_{2.5}$; SO_2; Pb	1997: O_3 – Moderate 2008: O_3 – Marginal	1997: $PM_{2.5}$	NO_X – 100 VOC – 50 $PM_{2.5}$ – 100 SO_2 – 100
	VA-1 Receiver Site				
	VA-1 Lateral (MP: 0.0-2.0)				

NO_X oxides of nitrogen
VOC volatile organic compound
$PM_{2.5}$ particulate matter less than or equal to 2.5 microns in aerodynamic diameter
SO_2 sulfur dioxide
TPY tons per year

TABLE 3.1.8-2

WB XPress Project
General Conformity Applicability Analysis

County / Requirement	NO_x (TPY)	VOC (TPY)	$PM_{2.5}$ (TPY)	SO_2 (TPY)
Fairfax County, Virginia				
Emissions	25.75	3.49	3.24	0.83
General Conformity *De Minimis* Threshold	**100**	**50**	**100**	**100**
General Conformity Determination Required	**No**	**No**	**No**	**No**

NO_X oxides of nitrogen
VOC volatile organic compound
$PM_{2.5}$ particulate matter less than or equal to 2.5 microns in aerodynamic diameter
SO_2 sulfur dioxide
TPY tons per year

3.1.9 Coastal Land Management

Coastal Lands Management is a state-local cooperative program administered by VDEQ's Water Division and 84 localities in Tidewater, Virginia established pursuant to the Chesapeake Bay Preservation Act (Virginia Code §§ 62.1-44.15:67 through 62.1-44.15:79) and Chesapeake Bay Preservation Area Designation and Management Regulations (Virginia Administrative Code 9 VAC 25-830-10 et seq.).

According to Section 9 VAC 10-20-150 B of the Chesapeake Bay Preservation Act (CPA), construction, installation, operation, and maintenance of natural gas transmission lines and their appurtenant structures in accordance with (i) regulations promulgated pursuant to the Erosion and Sediment Control Law and the Virginia Stormwater Management Act, (ii) Columbia's E&SC Plan and Columbia's Stormwater Management Plan, or (iii) local water quality protection criteria at least as stringent as the above Commonwealth requirements will be deemed to constitute compliance with the CPA Act requirements of this chapter.

Columbia will adopt and implement FERC's 2013 Plans and Procedures during and after the construction activities as well as adhere to state and local erosions and sedimentation and stormwater requirements as applicable. Variances to these Plans and Procedures were submitted to FERC on June 14, 2016 in order to fill wetlands that were unable to be avoided by alternatives analysis. Similarly, a local county permit application is anticipated to be submitted to Fairfax County for the proposed Chantilly Compressor Station.

As described in the ECS and in Section 2.5.1, after the pipeline is installed across a waterbody, the stream banks will be stabilized and restored as near as practicable to pre-existing conditions. Stabilization measures could include seeding and mulching, and installation of erosion control measures. Temporary erosion controls will be installed immediately once the bank is fully restored. The waterbody crossings will be inspected and maintained until restoration has reached at least 70% vegetation.

Furthermore, Columbia will complete final grading 20 days after backfilling is complete, and final restoration 7 days after final grading is complete, weather permitting. Columbia's Environmental Inspector will monitor the effectiveness of temporary erosion control measures. The Project has been designed to meet the requirements of this section.

Resource Protection Areas

Resource Protection Areas are composed of tidal wetlands, non-tidal wetlands connected by surface flow and contiguous to tidal wetlands or waterbodies with perennial flow, tidal shores, and a buffer area not less than 100 feet in width located adjacent to and landward of the components listed above, and along both sides of a waterbody with perennial flow. According to Section 9 VAC 10-20-150 B, the CPA exempts the construction of public utilities, railroads, public roads and appurtenant facilities from the Regulations. However, the Project complies with this section because Columbia will adhere to its E&SC Plan, and a Stormwater Plan that will be developed for the Project.

Resource Management Areas

Resource Management Areas include land types contiguous to a RPA which have a potential for degrading water quality or diminishing the functional value of the RPA if not properly managed. These areas include floodplains, highly erodible soils, including steep slopes, highly

permeable soils, and non-tidal wetlands not included in the RPA. Similar to Resource Protection Areas, natural gas projects are also exempt from the Chesapeake Bay Act pursuant to Section 9 VAC 10-20-150B.

3.1.10 Advisory Policies

Although not required, in accordance with 15 CFR §§ 930.39(c) and 930.58(a) (3) applicants should demonstrate consideration of policies which are in the nature of recommendations. These include policies related to Coastal Natural Resource Areas, Coastal Natural Hazard Areas, Waterfront Development Areas, and Shorefront Access Planning and Protection. The proposed Line VA-1 and Chantilly Compressor Station will not affect areas of special consideration except for the Elklick Woodlands Natural Area Preserve and the Sully Woodlands District. Refer to Section 2.5.4 regarding Columbia's procedures for construction in parks, natural areas, and wildlife management areas.

4.0 OVERALL FINDINGS

Based on the information provided in sections 2.0 and 3.0, Columbia has determined impacts on Virginia coastal resources from construction and operation of the proposed Line VA-1, Chantilly Compressor Station, and Line VA-1 Receiver Site would be minor, and would be mitigated through implementation of established practices and procedures and applicable federal, state and local permits.

Federal consistency with Coastal Zone Management requirements will be achieved through the successful permitting of this project from local, state, and federal agencies. Columbia will not construct the Project until the aforementioned permits have been obtained. Furthermore, Columbia will construct the Project in adherence with the specific conditions required by the local, state, and federal permits obtained for the Project.

4.0 REFERENCES

National Oceanic and Atmospheric Administration (NOAA). 2015a. Essential Fish Habitat Mapper. Available online at http://www.habitat.noaa.gov/protection/efh/efhmapper/index.html. Accessed July 2015.

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COLUMBIA GAS TRANSMISSION, LLC
WB XPRESS PROJECT

FEDERAL CONSISTENCY CERTIFICATION
APPENDIX A

Topographic Map

COLUMBIA GAS TRANSMISSION, LLC
WB XPRESS PROJECT

FEDERAL CONSISTENCY CERTIFICATION
APPENDIX B

Aerial Maps

COLUMBIA GAS TRANSMISSION, LLC
WB XPRESS PROJECT

FEDERAL CONSISTENCY CERTIFICATION
APPENDIX C

Columbia's Environmental Construction Standards

COLUMBIA GAS TRANSMISSION, LLC
WB XPRESS PROJECT

FEDERAL CONSISTENCY CERTIFICATION
APPENDIX D

USACE - Norfolk District Wetland and Waterbody Delineation Report

COLUMBIA GAS TRANSMISSION, LLC
WB XPRESS PROJECT

FEDERAL CONSISTENCY CERTIFICATION
APPENDIX E

Agency Correspondence